Amendments to the claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A source selection system in a communication switch having active and redundant data flow paths, said source selection system, comprising:

a plurality of corresponding datasources operating independently and outputting in parallel the same data subject to data transmission errors that may be different for each of said datasources;

one of said corresponding datasources being selected as an active datasource, wherein the data output thereby is used as active data for onward transmission over the active data flow path within said switch, and the other of said corresponding datasources serving as a redundant datasource wherein the data output thereby acts as substitute data for use in the event of inadequate operational performance of said active datasource;

a validation module associated with said plurality of corresponding datasources adapted to monitor each of said datasources for transmission errors and provide information relating to said transmission errors;

an assessment module receiving said information from said validation module and assessing operational performance of each of said datasources based on said information to determine which of said data sources has better operational performance; and

a source selector responsive to instructions from said assessment module to ~~select~~ change the datasource selected as said active datasource to a new one of said corresponding datasources when said assessment module determines that said new one of said datasources has a better ~~one of said datasources based on the~~ operational performance than said one of said datasources~~of said plurality of datasources~~.

2. (Previously presented) The source selection system as claimed in claim 1, wherein said validation module comprises a plurality of validation sub-modules, each one of said plurality of validation sub-modules associated respectively with one of said plurality of datasources.

3. (Previously presented) The source selection system as claimed in claim 2, wherein said validation module performs an integrity check on data transmitted by said datasources to provide information relating to transmission errors.

4.(Previously presented) The source selection system as claimed in claim 3, wherein said assessment module evaluates severity of said transmission errors provided in said information and causes said source selector to select said active datasource based on said severity of said transmission errors.

5.(Previously presented) The source selection system as claimed in claim 4, wherein said integrity check on said data comprises a parity check and a cyclic redundancy check.

6. (Previously presented) The source selection system as claimed in claim 5, wherein said integrity check is performed on a payload portion of said data.

7. (Previously presented) A source selection system as claimed in claim 6, wherein said integrity check is performed on a header portion of said data.

8.(Currently amended) The source selection system as claimed in claim 7, further comprising a plurality of processing cards and an interface card in said communication switch, said plurality of processing cards providing said plurality of datasources, and said source selector operating at an input to said interface card.

9. (Previously presented) The source selection system as claimed in claim 8, wherein said integrity check is performed upon said data being received by at least one of said processing cards of said communication switch.

10.(Previously presented) The source selection system as claimed in claim 9, wherein said source selector is a multiplexer.

11. (Currently amended) A method of selecting a datasource in a communication switch, wherein a plurality of datasources output the same data in parallel subject to transmission errors that may be different for each datasource, said method comprising the steps of:

monitoring said datasources for transmission errors to provide information relating to said transmission errors; and

continually assessing operational performance of each of said datasources based on said information to determine which datasource has the better operational performance; and

~~based on the operational performance of said plurality of datasources,~~ continually selecting ~~one of said datasources as~~ an active datasource a first datasource currently having better operational performance, wherein the data output thereby is used as active data for onward transmission while said selected datasource continues to have better performance.

and ~~the other~~a second of said datasources serving as a redundant datasource, and wherein the second of said datasources ~~wherein the data output thereby serves as substitute data for use in the event of inadequate performance of said active~~becomes the active datasource if the second of said datasources has better performance than the first of said datasources.

12. (Canceled)

13.(canceled)

14.(Previously presented) The method as claimed in claim 11, wherein said monitoring of said first datasources for transmission errors is executed by performing an integrity check on data originating from said datasources.

15. (Previously presented) The method as claimed in claim 14, wherein the active datasource is identified based on the severity of said transmission errors.

16. (Previously presented) The method as claimed in claim 15, wherein said integrity check on said data comprise parity checks and cyclic redundancy checks.

17.(Previously presented) The method as claimed in claim 16, wherein said integrity check is performed on a payload portion of said data.

18. (Previously presented) The method as claimed in claim 17, wherein said integrity check is performed on a header portion of said data.

19.(canceled)

20. (canceled)

21.(Currently amended) In a communication switch including active and redundant data flow paths a source selection system comprising:

a first communication module comprising a first chain of successive data processing elements outputting data,

a second communication module comprising a second chain of successive data processing elements outputting data;

each of said data processing elements in said first communication module having a corresponding data processing element in said second communication module, whereby successive pairs of data processing elements in said first and second communication modules output the same data in parallel subject to transmission errors which may be different for each data processing element of said successive pairs of data processing elements;

cross connects for cross-connecting an output of at least some of said data processing elements in each of said first and second chains with an input of a following said data processing element in the other of said first and second chains;

a validation module associated with said data processing elements adapted to monitor said data processing elements for transmission errors in the data output thereby and provide information relating to said transmission errors;

an assessment module receiving said information from said validation module and assessing an operational performance of said data processing elements based on said information to determine which of said data processing elements has better operational performance; and

a source selector responsive to instructions from said assessment module to select as an upstream active data source for a particular said data processing element one of said data processing elements of a preceding pair of said data processing elements based on the operational performance of said data processing elements in said preceding pair, the other of said data processing elements of said preceding pair of said data processing elements serving as an upstream redundant source until the operational performance of said upstream active source becomes worse than said upstream redundant data source, whereupon said source selector switches roles of said active and redundant data sources so that the datasource with the better operational performance becomes the active datasource of said preceding pair of data processing elements.

22.(Previously presented) The source selection system as claimed in claim 1, wherein said assessment module continually instructs said source selector to select the datasource with the best operational performance.